

## **Evaluation of Medical Error Status in Various Wards of Shohadaye Ashayer Hospital, Khorramabad, Iran**

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**Abstract:** Medical errors are known as the most important challenges that healthcare systems in all countries are encountered to them. To provide security and safety for patient is one of the major items in the health care systems. Confessing medical errors imposed on patient and education system is found to be an important aspect of medical ethics and care in turn lowers incidence of errors. Given the importance of identifying and reporting occurred medical errors, the present research aimed to assess medical errors in hospital wards of Shohadaye Ashayer Hospital Khorramabad so that findings of this research can inspire us to incorporate medical errors as a very important subject in the curriculum of medical students and finally physicians can do best examination and treatment with minimal or no errors and inaccuracies. The present research is descriptive in nature which lasted from April to March 2015. Statistical population (subjects) included employees and supervisors, nurses, staffs, lab safety facilitator, pharmacy safety facilitator, surgery room personnel, equipment and personnel in the hospital wards, including the emergency department, men surgery, women surgery, operating room, orthopedics, internal medicine ward, neurology, laboratory room, surgery, infectious, ophthalmic, reception, pharmacy and CCU hospital in Shohadaye Ashayer Hospital- Khorramabad.

**Keywords:** *Medical Error, Hospital, Khorramabad, Iran.*

### **Introduction**

Mistakes in human action are inevitable and serve as an integral part of human reality [1]. Medical errors are among the most important challenges facing health systems in all countries [2, 3]. Confessing medical errors imposed on patient and education system is found to be an important aspect of medical ethics and care in turn lowers incidence of errors [4].

Medical errors may occur while inpatient care in hospitals, interpretation of laboratory results, diagnosis, surgery, prescription drugs, medical devices etc. [5].

Some factors such as fear of reputation loss among colleagues, fear of blaming by colleagues, fear of litigation patient and prosecution, prejudice and fear of negative

propaganda against doctors and medical impact of the declaration are the main drawbacks for self-reporting. According to principles of medical ethics, when a type of medical error is occurred, wrongdoer should present honest report on what went wrong [6]. In US medical errors caused the death of 88,000 people [7]. In Britain medical error economical loss has been estimated to be 2 billion £, causing damage to 850,000 people per year [8].

According to research, out of 10 people admitted to hospital, a person experienced a traumatic event that about half of them are preventable. At the same time about one third of these events are harmful for patients [9]. People are fallible and errors are inevitable even in the best organizations [10]. Error disclosure is a basis for maintaining and improving patient safety. Health care providers have moral and professional obligation for errors disclosure [11, 12].

Given the importance of identifying and reporting medical errors, the present research deals with medical errors in hospital wards of Shohadaye Ashayer Hospital- Khorramabad so that findings of this research can inspire us to incorporate medical errors as a very important subject in the curriculum of medical students and finally physicians can do best examination and treatment with minimal or no errors and inaccuracies.

## Methods

The present research is descriptive in nature which lasted from April to March 2015. Statistical population (subjects) included employees and supervisors, nurses, staffs, lab safety facilitator, pharmacy safety facilitator, surgery room personnel, equipment and personnel in the hospital wards, including the emergency department, men surgery, women surgery, operating room, orthopedics, internal medicine ward, neurology, laboratory room, surgery, infectious, ophthalmic, reception, pharmacy and CCU hospital in Shohadaye Ashayer Hospital- Khorramabad.

The data collection instrument in the present research is self-reports of hospital staffs in 2015.

## Results and Discussion

As it can be seen in table 1, emergency ward with 165 errors accounted for highest error and reported large number of medical error (table 1).

The wards laboratory (276), hospital pharmacies (158) and internal (136) were the most important error reporting units (Table 2). Additional information on this is specified in Table 2 and 3.

As it is illustrated in table 4, the nurses accounted for largest number of medical errors (398). Information on jobs and staffs are presented in table 4.

**Table 1: The errors made at different hospital wards and various units of Shohadaye Ashayer Hospital Khorramabad in 2015**

Infectious	Men burning	CCU	Neurology	Women surgery	Emergency
71	2	2	42	49	165
Men surgery	Autoclave	Neurosurgery	Men Orthopedic	Hospital pharmacy	Eye & ENT
37	2	29	15	19	27
ICU Neurology	Hospital Reception	Surgery-ICU	Lab	Operation room	Internist
5	1	10	5	5	143
BICU	All wards	Women burning	hematology	Radiology	Dialysis
7	1	2	10	1	21
Orthopedic Operating Room	Not Declared	Urology	ICU General	Laundry	
6	7	28	19	1	

**Table 2: Statistics on wards and units reporting medical error in terms of ward or month and year**

Ward	Number of medical errors till March 2015	Ward	Number of medical errors till March 2015
Emergency	8	Urology	18
Hospital pharmacy	276	Dialysis	21
Internist	158	Radiology	16

**Table 2: Continue**

Infectious	136	General ICU	1
Eye and ENT	39	Surgical ICU	7
Women surgery	13	BICU	2
Men surgery	24	Informatics	3
Neuro surgery	17	Physiotherapy	1
Hematology	6	autoclave	1
Neurology	7	Not Declared	2

**Table 3: Number of medical error reported by wards in 2015**

Dialyze	Neurology	Urology	Women surgery	Infectious	Internal	Hospital pharmacy	Laboratory
16	18	21	24	39	136	158	276
BICU	Not declared	General ICU	Neurosurgery	Hematology	Emergency	Eye ENT	Men Surgery
3	5	6	7	7	8	13	13
Men burning	Surgery room Surgery	Surgery room Orthopedic	Orthopedic men	Autoclave	ICU	radiology	Women burn
1	1	1	2	2	2	2	2
Endoscopy	ICU Neurology	Outpatient Pharmacy	CCU	Laundry	Pathology	Medical documents	Informatics
-	-	-	-	-	-	-	1
Reception	Spirometry	ESWL	Sonography	Dental	Clinic	Laundry	
-	-	-	-	-	-	-	

**Table 4: Number of medical errors made by staffs in hospital**

Operating room personnel	1	Doctor	4
specialist	1	Laboratory staff	4
receptionist	1	Head nurse	12
Patient	2	Secretary	13
Supervisor	2	Safety liaison	37
CT scan technician	2	Not Declared	268
Anesthesia staff	3	Nurse	398
Services	4		

**Table 5: Details on staffs reporting medical error in hospital**

Secretary	1	Anesthesia staff	2
Services	1	Laboratory staff	3
Health expert	1	Staff	10
Equipment Personnel	1	Head nurse	59
Supervisor	1	Safety liaison	151
Operating room personnel	1	Pharmacy liaison	177
CT scan technician	1	nurse	225

As it can be seen, it was found that nurses, pharmacy and laboratory personnel had the most medical error with number of 225, 177 and 151 respectively.

Medical errors are inevitable and at the same time are very common in the health system. Most benefit after the occurrence of medical errors is when a basic plan and systematic mechanism is present to evaluate and analyze the occurrence of medical errors and errors can be serves as opportunity to reform the health system and prevention of repeated next errors. When not resolve the root causes of the error and the error is frequently not detected by a particular person or any other person to replace him will be repeated.

Systematic approach to errors culture to organize and participate actively in staff meetings and team-purpose medical errors and identify and knowledge of the causes that lead to medical errors are, in effect prevent their occurrence is so necessary. When an adverse event occurs is important to find out who has made a mistake but we must examine the failure of defense mechanisms against what has been the emergence of error. Medical mistakes are inevitable and occur sporadically, sometimes mistakes are minimal and safe but in some cases are serious enough can endanger patients' lives.

Although error reports and events to promote patient safety alone do not forgivable, however, learning from mistakes

is essential if error-free report in order to spread the culture of blame and punishment, spread of reported errors is expected to prevent similar occurrences in the future. Hence here results of 94 medical errors by hospital personnel for April 2015 have been presented and it should be noted that error detection is a basis for maintenance and promote patient safety. Despite the moral obligation and professional service providers to disclose the error, error reporting among nurses is much less than its real value. Laboratory testing process consists of three stages: before, during and after each test, which are potential sources of error. Given the importance of laboratory results in patients' health with regard to the safety and health of patients, requires extensive attention to error sources [13].

Literature showed that the main source of error in pre-experiments that covers most errors so that most important are patient misdiagnosis, inappropriate tubing, small sample size, lack of patients' demographic data, changes in the elements and components of the sample in the sample, poor quality samples such as hemolysis and clotting as well as lack of proper transport of samples to the laboratory. We should

believe that laboratory errors can be a factor for some improved cases or sudden death. This is where laboratory errors get importance and we must remove or reduce the effort associated with these errors.

Medication errors are a global problem can lead to serious injuries and even death of patients. The primary outcome was a natural medication errors and increase patient length of stay in hospital and increased cost would be staggering. In general medication errors on patients, nurses and organizations have a negative impact, leading to a decline in quality of care. According to the importance of patient safety topics necessary to create an effective system for reporting and recording errors by minimizing reporting barriers is essential to reduce medication errors.

## Conclusion

The main purpose of medical error reporting systems is to learn from the experience of other health systems. It is important to note that this system alone will not improve patient safety but it is appropriate feedback to report that leads to changing and upgrading systems and methods.

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